

Public health round-up

Sudan crisis



Seasonal rains have exacerbated already dire conditions in refugee camps in Sudan and South Sudan, heightening the risks of disease, a group of humanitarian agencies has warned.

The rains, which in some places started in mid-May, will make many roads impassable, trapping people in unstable areas and deepening the current hunger crisis.

Jon Cunliffe, South Sudan Country Director for Save the Children, said: "A toxic combination of conflict, rising food and fuel prices, and severe cash shortages is having a devastating effect on the civilian population in both countries. With the rains on the way the situation could not be more critical. We urgently need the fighting to stop so that we can get access and children can be protected from violence, deprivation, displacement and recruitment."

The warning has been jointly issued by Save the Children, Christian Aid, the International Rescue Committee, Oxfam and Refugees International.

Obesity problems ahead

Obesity will overtake undernourishment as the key dietary health problem in the Caucasus and Central Asia region by the year 2030, predicts a report from the United Nations Food and Agriculture Organization (FAO).

FAO predicts that 2% of the Caucasus and Central Asia population will be undernourished by 2030, but about 15% of the population will be obese.

Obesity prevalence in Europe as a whole will be around the 18% mark by that time. This is a rise of about 2% from the 2005/2006 figure.

"The change in diets will lead to increases in the prevalence of overweight and obesity and a corresponding increase in diet-related non communicable diseases (NCDs)," says the report.

It added that for 2030 and beyond, the burden of NCDs is likely to be higher in the region's poorer countries, coupled with fewer resources to address the issue.

Nepal HIV treatment challenge

A lack of follow-up is hampering efforts to control HIV in Nepal, a government report says.

Nepal's antiretroviral therapy programme was introduced in February 2004. The number of HIV infections among adults between the ages of 15–49 in the country has decreased from just under 60 000 in 2005 to just above 40 000 in 2011, with a further projected decline to about 35 000 by 2015.

However, the report says that, of more than 8000 people currently undergoing antiretroviral therapy, some 9% are lost to follow-up, mainly due to a lack of effective surveillance.

"A fair amount of financial support is currently available for various surveillance activities," the report adds. "However, effective and timely implementation of planned surveillance activities by the current limited number of technical staff is a challenge. An adequate number of technical staff at the National Centre for AIDS and Sexually Transmitted Diseases Control is necessary for planning, implementing and disseminating appropriate surveillance data for informing policies and improving programmes."

Underweight children in Viet Nam

A third of children under five in Viet Nam are underweight, according to a national survey.

The prevalence of underweight children in 2010 was 17.5% while 29.3% were stunted. This equates to 3.4 million children. Furthermore, the prevalence of overweight-obesity among children under five is 5.6%. In urban areas the prevalence of overweight-obesity is 6.5%.

The survey was implemented in 512 randomly selected communes of 432 districts in 64 provinces. The data collection methods included interviews, anthropometric measurement, 24-hour dietary recall and patient information from health centres at communal, district and provincial levels.

Hypertension and diabetes increase

Over one in four adults worldwide has raised blood pressure – a condition that contributes to half of all deaths from stroke and heart disease, while one in 10 adults has diabetes, according to *World health statistics 2012*.

The World Health Organization report puts the spotlight on the growing problem of noncommunicable diseases.

For the first time, the report includes data on the percentage of men

and women with raised blood pressure and blood glucose levels.

In high-income countries, widespread diagnosis and treatment with low-cost medication have significantly reduced mean blood pressure across populations – and this has contributed to a reduction in deaths from heart disease. In Africa, however, more than 40% of adults in many countries are estimated to have high blood pressure. Most of these people remain undiagnosed, although many of these cases could be treated with low-cost medications, which would significantly reduce the risk of death and disability from heart disease and stroke.

“People with hypertension need to reduce the risk of complications through reduction of salt in the diet, healthy behaviours and risk-lowering medications as appropriate,” said Shanthi Mendis, coordinator of the Chronic Diseases Prevention and Management department at WHO.

Those with moderately high levels (blood pressure 160/100) or with comorbidities such as diabetes and other cardiovascular risk factors are at very high risk of hypertension complications such as heart attacks, strokes and renal disease.

Research scan

Diabetes pain breakthrough

One of the most distressing complications of diabetes is painful diabetic neuropathy – abnormal and persistent pain experienced by roughly 50% of patients. This condition impairs patients’ quality of life and affects sleep, mood, mobility, work, relationships, self-esteem and independence.

Currently there is no clear understanding of how abnormal glucose metabolism produces heightened pain in diabetics, but research offers new insights. Naila Rabbani and Professor Paul Thornalley, of the University of Warwick in the United Kingdom of Great Britain and Northern Ireland, have worked for 30 years on a reactive compound produced excessively from glucose in diabetes called methylglyoxal.

The research shows that methylglyoxal is a new culprit in pain and, having pinpointed its relevance, research is being undertaken to develop ways of inhibiting its activity.

Thornalley explained: “MG appears to attack and modify a key protein in the nerve endings called ‘Nav 1.8’ causing

Ghana vaccine expansion



GAVI/2012/Olivier Asselin

Ghana has become the first African country to introduce pneumococcal and rotavirus vaccines at the same time, tackling the world’s two biggest childhood killers – pneumonia and diarrhoea.

Globally, pneumonia and severe infant diarrhoea together take the lives of more than 2.7 million children under the age of five each year. In Ghana, these diseases account for approximately 20% of the country’s under-five child mortality. Ghana’s first lady, Ernestina Naadu Mills, led a special ceremony in Accra on 26 April, where the first doses of the vaccines were administered to children.

“Our children have been dying from these vaccine-preventable diseases for too long, but this moment begins a major fight back,” said health minister Alban SK Bagbin.

nerves to become super-sensitive to pain and extremes of temperature. So diabetics typically develop a heightened sensitivity to hot and cold, accompanied with intense pain.

“This collaborative research indicates that using small peptides to ‘scavenge’ the problem-causing compound may lead to a reduction in pain and opens up new routes to develop accurate, targeted drug treatments to help diabetics.”

<http://www.nature.com/nm/journal/vaop/ncurrent/full/nm.2750.html>

Cancer marker identified

Researchers have identified a new biomarker and potential therapeutic target for pancreatic cancer, an often-fatal disease for which there is currently no reliable method for early detection.

Pancreatic ductal adenocarcinoma is a leading cause of cancer-related death. Newly diagnosed patients have a median survival of less than one year, and a 5-year survival rate of only 3 to 5 percent. Therefore, biomarkers that can identify early onset of the disease are desperately needed.

“We found that a kinase called PEAK1 is turned on very early in pancreatic cancer,” says author Jonathan Kelber at the University of California San Diego Department of Pathology and Moores Cancer Center. “This protein was clearly detected in biopsies of malignant tumors from human patients – at the gene and the protein levels – as well as in mouse models.”

<http://cancerres.aacrjournals.org/content/72/10/2481.abstract> ■

Looking ahead

14 June: World Blood Donor Day <http://www.who.int/worldblooddonor/day>

28 July: World Hepatitis Day http://www.who.int/mediacentre/events/annual/world_hepatitis_day

1–7 August: World Breastfeeding Week <http://worldbreastfeedingweek.org>

19 August: World Humanitarian Day <http://ochaonline.un.org/whd>

10 September: World Suicide Prevention Day <http://www.iasp.info/wspd>